

401 KAR 101:040. Cleanup and sampling requirements.

RELATES TO: KRS 224.01-400, 224.01-410, 40 C.F.R. 260.11, EO 2008-507, 2008-531

STATUTORY AUTHORITY: KRS 224.01-410(3), EO 2008-507, 2008-531

NECESSITY, FUNCTION, AND CONFORMITY: KRS 224.01-410(3) authorizes the cabinet to promulgate administrative regulations providing for decontamination standards for methamphetamine contaminated properties. EO 2008-507 and 2008-531, effective June 16, 2008, abolish the Environmental and Public Protection Cabinet and establish the new Energy and Environment Cabinet. This administrative regulation establishes the cleanup requirements for methamphetamine contaminated properties.

Section 1. Applicability. (1) This administrative regulation applies to an owner of a property where a notice of methamphetamine contamination has been placed.

(2) An owner of a contaminated property shall not have the notice removed until the owner has complied with:

- (a) Section 2 of this administrative regulation for demolition;
- (b) Sections 3, 4, and 8 through 10 of this administrative regulation for a Tier 1 contaminated property;
- (c) Sections 3, 5, and 8 through 10 of this administrative regulation for a Tier 2 contaminated property;
- (d) Sections 3, 6, and 8 through 10 of this administrative regulation for a Tier 3 contaminated property; or
- (e) Sections 3 and 7 through 10 of this administrative regulation for a Tier 4 contaminated property.

Section 2. Demolition Requirements. (1) An owner of contaminated property may choose to demolish the property instead of meeting the decontamination standards of this administrative regulation.

(2) An owner shall notify the cabinet, in writing, of the intent to demolish a contaminated property at least ten (10) days before the demolition activities begin.

(3)(a) An owner shall not be required to hire a certified contractor for the purposes of demolition of a contaminated property.

(b) Within sixty (60) days of demolition, the owner shall submit to the cabinet, the Owner's Certificate of Demolition (OCD), DEP 6085, May 2009, with the following:

- 1. Predemolition photographs;
- 2. Postdemolition photographs; and
- 3. Waste disposal receipts.

(c) An owner shall render all furnishings unusable prior to disposal.

(d) All solid waste generated during demolition activities shall be disposed of at a permitted solid waste contained landfill.

(4) An owner shall comply with all applicable federal, state, and local regulations regarding demolition of a property.

(5) The cabinet shall review an Owner's Certificate of Demolition (OCD) upon receipt.

(a) If the cabinet determines the OCD form is complete, a release letter for the contaminated property shall be issued to the owner, local health department, the Department for Public Health, and the Kentucky State Police; or

(b) If the cabinet determines the OCD form is not complete, the cabinet shall notify the owner, in writing, of the deficiencies.

Section 3. General Cleanup Requirements. (1) The requirements of this section shall be performed by a certified contractor.

(2) The following cleanup requirements shall be necessary for each tier of contaminated properties:

(a)1. The certified contractor shall conduct a Preliminary Assessment of the property and all structures on the property.

2. Information to be collected and activities to be conducted shall include:

a. A copy of the Clandestine Drug Lab Preliminary Assessment Tier Selection Criteria, DEP 1016, May 2009, for the property, available by open records request to the cabinet;

b. Conduct air monitoring inside the structure for the presence of volatile compounds with a photoionization detector (PID) or flame ionization detector (FID). Additional field instrumentation may be utilized to determine proper level of personal protective equipment (PPE); and

c. Conduct inspection of the dwelling, other structures on the property and surrounding land, with special attention given to:

(i) Methamphetamine manufacturing areas;

(ii) Hazardous chemical use, storage, or disposal areas;

(iii) Fire damage;

(iv) Etched fixtures in bathrooms and kitchen;

(v) Heating, ventilation, and air conditioning systems (HVAC);

(vi) Plumbing and septic system;

(vii) Spills; and

(viii) Stained areas;

(b)1. If suspicious items (for example containers with residues, tubing, odd containers of kitty litter or paraphernalia) are discovered that are apparently related to methamphetamine manufacturing, a contractor shall contact Kentucky State Police or local law enforcement immediately.

2. If law enforcement personnel do not remove these items, they shall be containerized, properly disposed, and the disposal shall be documented;

(c) Law enforcement officials shall be contacted if firearms or bulk hazardous substances are encountered during cleanup;

(d) Using a container made of puncture-resistant plastic, carefully segregate and properly dispose of any hypodermic needles found on the property; and

(e) Prior to the cleanup response, remove all ancillary volatile and semi-volatile chemical sources that may be located on the property.

(3) After completion of cleanup, confirmation samples shall be collected in accordance with procedures in Sections 9 and 10 of this administrative regulation to determine if the property meets the decontamination standard as established in Section 11 of this administrative regulation.

(4) The following documentation shall be completed and submitted with the Contractor's Certificate of Decontamination (CCD), DEP 5035, May 2009, to the cabinet within sixty (60) days of completion of cleanup activities:

(a) A site map drawn to scale depicting:

1. The property and its layout, including identification of other structures on the property and location of all potential areas of contamination observed during preliminary assessment;

2. The property's location relative to streets and surrounding properties; and

3. Streams and drainage features located near or adjacent to the property;

(b) Sketches of each room and each floor of the property depicting the:

1. Areas of observed contamination;

2. Location of appliances;

3. Kitchen and bathroom fixtures;
4. Locations of postdecontamination samples; and

(c) Photographs shall be taken of conditions before and after decontamination and of all postdecontamination sample locations in order to provide documentation of the cleanup.

Section 4. Tier 1 Response. (1) The cleanup requirements of this section shall be performed by a certified contractor.

(2) In addition to the general cleanup requirements in Section 3 of this administrative regulation, a cleanup for a Tier 1 Response shall include, at a minimum, the following:

- (a) Ventilate the property for a minimum of forty-eight (48) hours prior to cleanup;
 - (b)1. Replace air filters in the HVAC system.
2. The HVAC shall not be turned on until the property has been decontaminated;
 - (c) Target areas of a minor spill for cleanup;
 - (d) Wash all hard surfaces with hot water and cleansers. This includes:
 1. Appliances;
 2. Floors;
 3. Walls;
 4. Ceilings;
 5. Countertops;
 6. Cabinets; and
 7. Bathroom fixtures;
 - (e) Shampoo rugs;
 - (f) Steam clean mattresses and cloth furniture;
 - (g) Have bed linens and drapes laundered;
 - (h) Using photo documentation as proof, remove all clothing, children's toys, or other absorbent items left behind; render them unusable; and properly dispose of them; and
 - (i) Thoroughly clean surfaces that may collect dust.
- (3) All contaminated properties shall require at least a Tier 1 cleanup response.

Section 5. Tier 2 Response. (1) The cleanup requirements of this section shall be performed by a certified contractor.

(2) In addition to the general cleanup requirements in Section 3 of this administrative regulation, a cleanup for a Tier 2 Response shall include, at a minimum, the following:

- (a) Ventilate property for a minimum of seventy-two (72) hours;
- (b) Target areas of a spill for cleanup;
- (c) Wash all hard surfaces with hot water and cleansers, including:
 1. Appliances;
 2. Floors;
 3. Walls;
 4. Ceilings;
 5. Countertops;
 6. Cabinets; and
 7. Kitchen and bathroom fixtures;
- (d) Using photo documentation as proof, remove all clothing, children's toys, or other absorbent items left behind; render them unusable; and properly dispose of them;
- (e) Thoroughly clean surfaces that may collect dust;
- (f) Etched, stained, or contaminated appliances and fixtures, to the point that successful cleaning is in doubt, shall be rendered unusable and removed;

- (g) All stained surfaces and contaminated items shall be rendered unusable, removed, and disposed of at a permitted solid waste contained landfill;
- (h) Submit all disposal receipts with the CCD;
- (i) All nonstained hard surfaces shall be double-washed with hot water and cleaners;
- (j) All washed hard surfaces shall be painted or sealed; and
- (k)1. Replace air filters in the HVAC and clean ventilation duct works.
- 2. The HVAC shall not be turned on until the property has been decontaminated.

Section 6. Tier 3 Response. (1) The cleanup requirements of this section shall be performed by a certified contractor.

(2) In addition to the General Cleanup Requirements established in Section 3 of this administrative regulation, a cleanup for a Tier 3 Response shall include, at a minimum, the following:

- (a) Ventilate property for a minimum of five (5) days;
- (b) Using photo documentation as proof, remove all clothing, children's toys, or other absorbent items left behind; render them unusable; and properly dispose of them;
- (c) Thoroughly clean surfaces that may collect dust;
- (d) Etched, stained, or contaminated appliances and fixtures shall be rendered unusable and removed;
- (e) Absorbent surfaces and materials shall be rendered unusable and removed;
- (f) All stained surfaces and contaminated items shall be rendered unusable, removed, and disposed at a permitted solid waste contained landfill;
- (g) Submit all disposal receipts with the CCD;
- (h) All nonstained hard surfaces shall be double-washed with hot water and cleaners;
- (i) All washed hard surfaces shall be painted or sealed;
- (j)1. Replace air filters in the HVAC, and clean ventilation duct works.
- 2. The HVAC shall not be turned on until the property has been decontaminated;
- (k) If there is an on-site septic system, access the septic tank, and screen the septic tank for VCs by using a PID and test the pH of the liquid in the tank.
- 1. If the VC and pH readings are indicative of impacts from methamphetamine lab waste, collect a sludge sample and follow the procedures and standards per 401 KAR 31:030 to determine if the waste is hazardous.
- 2.a. If it is determined that the waste is hazardous, pump septic system and dispose of sludge at a hazardous waste facility based on the waste characterization sample analyses.
- b. The contractor shall keep all disposal receipts or manifests;
- (l)1. Clean or remove contaminated subfloor or other framing materials prior to reconstruction.
- 2. Structural members of the building that would compromise structural integrity if removed, shall not be removed;
- (m) All surfaces, not replaced, shall meet the decontamination standard after cleanup and painting or sealing; and
- (n) Removed items shall be disposed at a permitted solid waste contained landfill and documented with copies of disposal receipts.

Section 7. Tier 4 Response. (1) Law enforcement agencies shall consult with the cabinet prior to making this Cleanup Tier Recommendation.

(2)(a) A large amount of contamination inside the structure may render its cleanup uneconomical, and demolition may be the most cost-effective option.

(b) The owner shall submit documentation of the property being demolished, including the OCD and disposal receipts, to the cabinet, as established in Section 1 of this administrative regulation.

Section 8. Releases to the environment. If releases of hazardous substances, pollutants, or contaminants to the environment are documented either through observations of, for example, open dumping, presence of burn pits, outside cooking areas, they shall be subject to the requirements of KRS 224.01-400 and 401 KAR 100:030.

Section 9. Methamphetamine Sampling Requirements. (1)(a) In accordance with the procedures in Appendix B.1 of Kentucky Cleanup Guidance for Methamphetamine Contaminated Properties, incorporated by reference in 401 KAR 101:010, each room and space in the contaminated property shall be wipe-sampled following decontamination activities to demonstrate compliance with the decontamination standards as established in Section 10 of this administrative regulation.

(b) Additional samples shall be collected in the following areas:

1. Suspected cooking locations;

2. Observed chemical spills; and

3. Waste storage areas identified during the Preliminary Assessment of the contaminated property.

(2) Table 1 lists the minimum number of composite samples that shall be completed for post-decontamination sampling for methamphetamine.

(a) All samples shall be collected from cleaned surfaces and not new materials.

(b) If a wall or material identified below is removed and replaced as part of the decontamination, the contractor shall designate another location for sampling and document in the Contractor's Certificate of Decontamination, DEP 5035, May 2009.

Table 1 Postdecontamination Sampling Protocols

Area	Sampling Protocol
Each Room	Four 10cm x 10cm samples for total of 400 sq. cm consisting of: <ul style="list-style-type: none">- 1 sample from location at or near center of floor*- 1 sample from location at or near center of ceiling- 1 sample from location at or near center of 2 walls (samples may make up one composite sample for each room) + the following samples
Kitchen	Four 10cm x 10cm samples for total of 400 sq. cm consisting of: <ul style="list-style-type: none">- 1 sample from countertop- 1 sample from stovetop- 1 range hood above stovetop, if present; if not

	<p>present, from a cabinet above the stovetop</p> <ul style="list-style-type: none"> - 1 floor in front of the stovetop <p>(samples may make up 1 composite sample)</p>
Bathroom(s)	<p>Four 10cm x 10cm samples for total of 400 sq. cm consisting of:</p> <ul style="list-style-type: none"> - 1 sample from counter-top - 1 sample from sink - 1 sample from toilet - 1 sample from shower or bathtub <p>(samples may make up 1 composite sample)</p>
HVAC System	<p>Four 10cm x 10cm samples for total of 400 sq. cm at 4 different locations in the ventilation system</p> <p>Sample cold air returns or plenums (samples may make up 1 composite sample)</p>
Appliances (Cleaned)	<p>One 10cm x 10cm sample from exposed surface of each cleaned appliance; if multiple appliances are present, up to 4 wipes may be combined into 1 composite sample representing 400 sq. cm</p>

* If the flooring is carpeting that has only been cleaned and not removed, the floor sample may be taken from the lowest point on one (1) wall nearest the cooking area, or just above the baseboard in non-cooking rooms.

(3)(a) To confirm cleanup of the property, all samples collected and analyzed shall be below the decontamination standard of $0.1\mu\text{g}/100\text{cm}^2$ as established in Section 11 of this administrative regulation.

(b) In addition to the samples noted in Table 1, the certified contractor shall also collect quality assurance and quality control wipe samples and field blanks in accordance with standard sampling and analytical practices as established in 40 C.F.R. 260.11.

(c) The contractor shall do the following:

1. Log all samples collected at the site and QA/QC samples on a chain of custody form;
2. Maintain proper temperature as established in U.S. EPA SW-846, incorporated by reference in 40 C.F.R. 260.11; and
3. Maintain records of sample shipment to the laboratory.

Section 10. Analytical Laboratory Requirements. (1) Certified contractors shall use a U.S. EPA or other nationally-accredited analytical laboratory to ensure that all analytical data shall be reliable and reproducible.

(2)(a) For methamphetamine analyses, the laboratory shall utilize Method 8270C-Modified, "Semi-volatile Organic Compounds by Liquid Chromatography or Gas Chromatography/Mass Spectroscopy", from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", U.S. EPA SW-846, Third Edition (Nov. 1986), Revision 3 (Dec. 1996), or other accredited laboratory methods to achieve a detection limit of at least 0.1µg/100cm², and include all quality assurance and quality control documentation required by the method.

(b) For all other waste or chemical analyses requiring an off-site environmental laboratory, U.S. EPA SW-846, 40 C.F.R. 260.11, methods shall be utilized.

(c) The certified contractor shall ensure that the laboratory used shall be an accredited laboratory capable of performing the required analyses.

Section 11. Cleanup Standards.

	Decontamination Standard
Methamphetamine	0.1 µg/ 100 cm ² (all surface materials)

Section 12. Incorporation by Reference. (1) The following material is incorporated by reference:

(a) "Owner's Certificate of Demolition", DEP 6085, November 2016; and

(b) "Contractor's Certificate of Decontamination (CCD)", DEP 5035, November 2016.

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at the Division of Waste Management, 300 Sower Boulevard, Frankfort, Kentucky 40601, Monday through Friday, 8 a.m. to 4:30 p.m. This material may also be obtained from the division's Web site at www.waste.ky.gov. (35 Ky.R. 1956; 2738; eff. 7-6-2009; TAm eff. 7-8-2016; TAm eff. 12-21-2016; TAm eff. 4-11-2018.)